REMARKS

Claims 1, 2 and 5-14 are pending.

Claim Rejections Under § 103

I. Claims 1, 2 and 5-12 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Application Publication No. 2003/0088006 to Yanagisawa et al. Applicants respectfully traverse.

The present claims relate to a method for producing a rubber master batch comprising mixing a natural rubber latex with a slurry solution of a filler previously dispersed into a liquid, characterized in that a high shear mixer comprising a rotor and a stator portion and having a shear speed of not less than 2000/s is used in the mixing of the natural rubber latex and the slurry solution.

Yanagisawa discloses a high shear mixer of rotor-stator type in paragraph [0036]. However, according to Yanagisawa, the high shear mixer of rotor-stator type is used only for making a filler slurry.

As demonstrated in the attached Declaration by Mr. Nishiura, the use of a high shear mixer in the mixing step of the natural rubber latex and the filler slurry is superior in homogeneity as compared to preparing only the filler slurry using a high shear mixer. *See,* Comparative Example 2.

More particularly, according to the present invention, the standard deviation σ of the amount of filler compounded can be reduced (i.e., the difference between the maximum amount of the filler and the minimum amount of the filler can be reduced). Thus, when a rubber composition is formed using a rubber master batch produced according to the present invention,

and wherein the rubber composition is used in a tire, the resulting tire has a homogeneous or uniform performance regardless of its portion.

In contrast, according Yanagisawa, the standard deviation σ of the amount of filler compounded increases. That is, the difference between the maximum amount of the filler and the minimum amount of the filler increases as compared to the present invention. Thus, when a rubber composition is formed using a rubber master batch produced according to the method of Yanagisawa, and wherein the rubber composition is used for a tire, the resulting tire has a scattered or varied performance depending on its portion.

One skilled in the art would not expect the result, i.e., improved homogeneity resulting from the particular method of the present invention, given Yanagisawa's disclosure. Thus, Yanagisawa fails to render obvious the present claims. Accordingly, withdrawal of the rejection is respectfully requested.

II. Claims 2, 8-11 and 13-14 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yanagisawa in view of U.S. Patent Application Publication No. 2002/0111413 to Lopez-Serrano Ramos et al. Applicants respectfully traverse.

Lopez discloses a rubber solution and a slurry solution prepared using a static mixer. Lopez fails to disclose or suggest a method whereby the natural rubber latex and the filler slurry are simultaneously charged into the static mixer and mixed with the static mixer, as presently claimed.

As demonstrated by the attached Rule 132 Declaration by Mr. Nishiura, the simultaneous injection of the natural rubber latex and the filler slurry into the static mixer yields a composition that exhibits superior homogeneity as compared to a composition which is prepared using a

mixture prepared by pre-mixing the natural rubber latex and the filler slurry. *See,* Comparative example 3. Moreover, according to either Yanagisawa or Lopez, the standard deviation σ of the amount of filler compounded increases. That is, the difference between the maximum amount of the filler and the minimum amount of the filler increases as compared to the present invention. Thus, when a rubber composition is formed using a rubber master batch resulting from either Yanagisawa or Lopez, and wherein the rubber composition is used for a tire, the resulting tire has a scattered or varied performance depending on its portion.

One skilled in the art would not expect the result, i.e., improved homogeneity, given the disclosure of either Yanagisawa or Lopez. Thus, Yanagisawa and Lopeez, either alone or in combination, fail to render obvious the present claims. Accordingly, withdrawal of the rejection is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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